

Research Article

Knowledge, Attitude, Practice of Pregnant Women and Husband's Support on the Implementation of Pregnancy Exercise

**Netania Xaviera Maringka, Adilla Nur Hamzah, Chintya Marcellin,
Ongky Satria, Julita Dortua Laurentina Nainggolan**

*Department of Obstetrics and Gynecology
Faculty of Medicine Universitas Pelita Harapan
Tangerang*

Abstract

Objectives: To evaluate the knowledge and attitudes of pregnant women and assess the level of support from their partners regarding the adoption of pregnancy exercises in the Tangerang region.

Methods: A quantitative analysis was employed for this study, utilizing a cross-sectional study design.

Results: Data were collected from 49 respondents, revealing a statistically significant relationship ($p=0.031$) between the knowledge of pregnant women and the implementation of pregnancy exercises. Additionally, a highly significant association ($p<0.001$) was observed between the attitudes of pregnant women and their adoption of pregnancy exercises. However, no significant relationship was found between the level of support from husbands and the implementation of pregnancy exercises.

Conclusion: This study concludes that there is a significant correlation between the knowledge and attitudes of pregnant women and the adoption of pregnancy exercises.

Keywords: attitude, husband support, knowledge, pregnancy, pregnancy exercise, prenatal yoga.

Correspondence author. Netania Xaviera Maringka. Department of Obstetrics and Gynecology
Faculty of Medicine Universitas Pelita Harapan. Tangerang. Email: fk@uph.edu

INTRODUCTION

In 2022 The World Health Organization (WHO) updated the recommendation guidelines regarding antenatal care that aims to provide positive pregnancy experience for pregnant mothers.¹ Antenatal care, also known as prenatal care, encompasses a series of activities initiated from conception through delivery. The primary objectives are to prevent, identify, and address conditions that may pose a threat to the health of both the fetus/newborn and the expectant mother. Additionally, it aims to assist women in approaching pregnancy and childbirth as positive experiences, ensuring a healthy pregnancy, a safe delivery, and the birth of healthy babies. One of the key components of antenatal care, as outlined in the Ministry of Health Regulations, is the preparation for a safe delivery. This involves the active participation of pregnant women and

their partners in maintaining the health of the mother and making preparations for childbirth.²

It is important to understand the normal physiological changes that occur in pregnancy as these will help distinguish them from abnormal adaptations. Despite major advances in health care, to date, the Maternal Mortality Rate (MMR) is still in the range of 189 per 100,000 live births, has almost reached the set target of 183 per 100,000 KH in 2024.³ In the pursuit of expediting the achievement of optimal health status for pregnant women, the community plays a crucial role, both as individuals and organizations. One such role involves conducting classes for expectant mothers. A noteworthy program within the framework of antenatal care is the pregnancy exercise class. These classes, tailored for pregnant women, often take the form of pregnancy exercises. Pregnancy exercises are widely recognized for their benefits in preparing

for childbirth, particularly in terms of muscle relaxation and maintaining proper posture during and after pregnancy.⁴

Numerous studies have explored the various aspects of pregnancy exercise, ranging from its impact on expediting the second stage of labor in vaginal primigravida deliveries, its association with physical and psychological preparedness for childbirth, to its influence on the occurrence of perineal rupture.⁵⁻⁷ However, there remains a significant gap in the literature concerning the knowledge, attitudes of pregnant women, and the role of husband's support in facilitating pregnancy exercise. This study aims to investigate the relationship between the knowledge and attitudes of pregnant women and the support provided by their husbands in the context of pregnancy exercise implementation.

METHODS

This study utilized a quantitative analysis approach with a cross-sectional study design. Data collection was conducted through online questionnaires distributed via Google Forms after obtaining informed consent from the respondents. The study focused on pregnant

women in their second and third trimesters, receiving regular antenatal check-ups at a public healthcare facility (Pusat Kesehatan Masyarakat/Puskesmas) in the Tangerang region, with a targeted sample size of 50 participants. The questionnaire's validity was assessed through a correlation coefficient test at a significance level of 0.05.

Data collection took place in March 2023, and statistical analysis was carried out using the chi-squared method in SPSS 25.0

RESULTS

Table 1. Sociodemographic Characteristic of Respondents

Variables	Frequency (n)	(%)
Age		
< 35	44	89.8
> 35	5	10.2
Trimester		
II	10	20.4
III	39	79.6
Implementation of pregnancy exercise		
Yes	30	61.2
No	19	38.8

Table 2. The Relationship of Knowledge of Pregnant Women to the Implementation of Pregnancy Exercise

Variable (knowledge)	Implementation of pregnancy exercise				OR (CI 95%)	P-value
	yes		no			
	n	%	n	%		
Adequate	17	81.0	4	19.0	4.904 (1.312-8.326)	0.031
Lack	13	46.4	15	53.6		

Table 3. The Relationship between Pregnant Women's Attitudes towards the Implementation of Pregnancy Exercise

Variable (attitude)	Implementation of pregnancy exercise				OR (CI 95%)	P-value
	yes		no			
	n	%	n	%		
Positive	20	90.9	2	9.1	17.000 (3.264-88.530)	< 0.001
Negative	10	37.0	17	63.0		

Table 4. The Relationship between Pregnant Women's Husband Support for the Implementation of Pregnancy Exercise

Variables (husband's support)	Implementation of pregnancy exercise				OR (CI 95%)	P-value
	yes		no			
	n	%	n	%		
Supported	29	65.9	15	34.1	7.733 (0.792-75.474)	0.130
Unsupported	1	20.0	4	80.0		

DISCUSSION

Based on Table 1, of a total of 49 respondents, 44 (89.2%) of them were women aged under 35 and 5 (10.8%) were aged above 35. The respondents gestational age was divided into two categories, with 39 (79.6%) were on their second trimester and 10 (20.4%) were on third trimester. Thirty of them (61.2%) claimed that they had engaged pregnancy exercise, while another 19 of the respondents (39.8%) had not.

According to the American College of Obstetricians and Gynecologists (ACOG), physical activity, including during pregnancy, offers numerous health benefits. Pregnancy is an opportune time to establish or maintain a healthy lifestyle, with exercise significantly contributing to the well-being of both the mother and fetus. Studies have shown that exercise during pregnancy can reduce the risks of macrosomia, gestational diabetes, cesarean delivery, and lumbar and sciatic pain.⁸ This statement is aligned with a study by Putri which states that women who participates in pregnancy exercise classes had significantly lower odds of experiencing prolonged labor, postpartum hemorrhage, and postpartum fever than those in the non-participant group.⁹ It is observed in this study that most of the respondents who have adequate knowledge regarding pregnancy exercises are also implementing it in their routines (81.0%). Majority of respondents who lack knowledge regarding pregnancy exercises do not implement it in their routines (53.6%). The calculated p-value of 0.031 confirms a significant relationship between pregnant women's knowledge and the actual implementation of pregnancy exercises.

Bivariate analysis of knowledge and the implementation of pregnancy exercise (Table 3) shows a significant relationship between the two, with a p value of 0,031 (OR 4.904, CI: 1.312-18.326). This is in line with a study in South Sumatera, Indonesia with 76 respondents showing a significant correlation between the two variables with a p value of 0,028.¹⁰ The attitude variable has been shown to be significantly related to pregnant women doing pregnancy exercise (Table 3), with a p-value of 0.001 (OR 17.000, CI: 3.264-88.530). These results are in line with research conducted in South Sulawesi, which stated that there was a significant relationship between attitude and the implementation of pregnancy exercise in pregnant women ($p = 0.01$).¹¹

To increase awareness of the benefits of physical activity during pregnancy, one should understand that social and cultural beliefs can influence health outcomes consequently. Physical activities during pregnancy is influenced by time, lack of child care or feeling unwell during pregnancy, whereas one of the factor that encourages physical activity is family support for refreshment and to prevent health problems in future.¹² Support from family members, friends, and organizations is important for a positive maternal environment. Lack of support are shown to be one of the risks for pregnant woman to develop psychological dysfunction in the offspring. Women with inadequate support were more likely to suffer from multiple psychological distresses.¹³

In addition to that, a study shows a significant positive relationship between family support and antenatal care (ANC). The higher the family support, the higher the scope of a good ANC examination can be accomplished, thus reducing the risk of maternal death.¹⁴ Husband's support is influenced by various factors such as intimacy, self-esteem, and social skills. Husband's support is more influenced by intimacy than other aspects of social interaction. It is shown that the more intimate a person is, the greater the support one gets.¹⁵ However, in the bivariate analysis conducted in this study, the relationship between husband's support and the implementation of pregnancy exercises yielded insignificant results ($p=0.130$, OR: 7.733, CI: 0.792-75.474). This lack of significance may be explained by findings in Saputra's study, where 53.3% of husbands did not encourage their wives to participate in pregnancy exercises. Various factors might contribute to this, including husbands' lack of awareness about the psychological stress experienced during pregnancy and the influence of cultural and educational backgrounds that assign full responsibility for pregnancy to the wife.¹⁶ Understanding this important role is the first step for a husband to be able to support the mother in having regular antenatal care visits. Mothers who lack support from their husbands tend not to make regular antenatal care visits, this is because the does not have encouragement or motivation from her husband, such as the husband taking the mother to health services, the husband asking about the results of the examination, the husband joining the examination room, the husband giving information about the importance of having an antenatal visit care.¹⁷

CONCLUSION

There is a significant relationship between knowledge of pregnant women and implementation of pregnancy exercise. In addition to that, a significant relationship exists between the attitude of pregnant women and implementation of pregnancy exercise. However, there is no significant relationship was found between husband's support and the implementation of pregnancy exercises.

ACKNOWLEDGMENT

We would like to thank Faculty of Medicine Universitas Pelita Harapan for providing a positive platform for medical students to always develop and who has given research permission and helped in completing this research.

CONFLICT of INTERESTS

The authors declare no conflict of interest in preparing this article.

REFERENCES

- World Health Organization. Imaging ultrasound before 24 weeks of pregnancy: 2022 update to the WHO antenatal care recommendations for a. positive pregnancy. 2022:1-2
- Kementrian Kesehatan Republik Indonesia. Pedoman Pelayanan Antenatal Terpadu. 2020;3:9
- Angka Kematian Ibu/AKI (Maternal Mortality Rate/MMR) Hasil Long Form SP2020 Menurut Provinsi, 2020. BPS. 2023.
- Kementrian Kesehatan Republik Indonesia. Pengendalian Mutu Pelatihan, Akreditasi Pelatihan. Pusat Pengembangan Kesehatan Carolus (PPKC). 2020:1
- Nikmah K, Muthoharoh H. Analisis Faktor-faktor Yang Mempengaruhi Keikutsertaan Senam Hamil Analysis of Factors Affecting Participation in Pregnancy Gymnastics. 2022:5
- Kurnia Widya Wati NW, Supiyati S, Jannah K. Pengaruh Senam Yoga terhadap Kesiapan Fisik dan Psikologis dalam Menghadapi Persalinan di BPM Lasmitasari, S.ST. *Jur Kes Kes.* 2018 Mar 12;14(1):39.
- Afni R, Ristica OD. Hubungan Senam Hamil dengan Ruptur Perineum pada Saat Persalinan di PMB Dince Safrina Pekanbaru. *Ensiklopedia J.* 2021;3(2).
- Brisker, M. L., & Gyamfi-Bannerman, C. Physical Activity and Exercise during Pregnancy and the Postpartum Period. *Am Coll Obstet Gynecol.* 2020;135:4
- Putri AMS, Mahindra MP. Effectiveness of Participation in Pregnancy Classes to Reduce the Incidence of Obstetric Labor Complications and Cesarean Section. *Indones J Obstet Gynecol.* 2022;10(4):229-34.
- Astria W. Pengetahuan Tentang senam Hamil terhadap Pelaksanaan Senam Hamil pada Ibu Hamil di Kelas Posyandu. 2020;9:1
- Irnawati. Hubungan Pengetahuan Dan Sikap Ibu hamil terhadap Pelaksanaan senam hamil di Puskesmas Turikale Maros. *Jur Kes Abdurrahman Palembang.* 2017;1
- Al-Youbi GM, Elsaid T. Knowledge, attitude, and practices on exercise among pregnant females attending al-Wazarat Health Center, Riyadh, Saudi Arabia. *J Fam Med Primary Care;* 2020;9(8):3905-15
- Wang Y-N, Yuan Z-J, Leng W-C, Xia L-Y, Wang R-X, Li Z-Z, et al. Role of perceived family support in psychological distress for pregnant women during the COVID-19 pandemic. *World J Psych.* 2021;11(7):365-74
- Alburuda F., Damayanti NA. Relationship of Family Support to Antenatal Care (ANC) Inspection in Work Area of Puskesmas Gunung. Anyar Surabaya. Faculty of Public Health Universitas Airlangga. Indonesia. 2019;1:4
- Renata B, Agus D. Association of Husband. Support and Postpartum Blues in Postpartum Women. *Indones J Obstet Gynecol.* 2021;9(3):140-3. doi: <https://doi.org/10.32771/inajog.v9i3.1467>
- Saputra A. Hubungan Dukungan Suami terhadap tingkat Kecemasan Ibu primigravida pada Trimester Tiga di BPS NY. Murwati Tony AMD. *Keb Kota Semarang. FIKkeS .* 2013:8-9
- Damanik E., Etty CR., Sijabat. F. Analisis DukunganSuami Selama Kehamilan Terhadap Kunjungan Antenatal Care. *Jur Kes Kom.* 2021;7(1):4-6